

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher	ISBN - 0022852735		Publisher - Macmillan/McGraw-Hill		Provided by the Publisher
	Student Edition Big Book Package				
	Type - P2	Author - Hackett, and others			
	Copyright - 2009	Edition - First	Readability -	Modified Dale-Chall 1.6	
	Course - Science		Grade(s) -	1	
	Teacher Edition ISBN if applicable			0022871497	

Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

This basal aligns well with the KY Standards, however it could be strengthened in the Big Ideas including Biological Change, Energy Transformations, and Interdependence. Each lesson is organized around the 5-E Learning Cycle Model. Success with this basal requires that the teacher implements all components of each lesson. Most activity materials can be obtained locally, but some will have to be ordered. Important student and teacher resources are not included with the essential components and are unavailable as "Free with Purchase" items.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

☐ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | |
|---|---|
| a) Structure and Transformation of Matter | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| b) Motion and Forces | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| c) The Earth and the Universe | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| d) Unity and Diversity | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| e) Biological Change | <input type="checkbox"/> Strong <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| f) Energy Transformation | <input type="checkbox"/> Strong <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| g) Interdependence | <input type="checkbox"/> Strong <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

☐ Strong ☒ Moderate ☐ Little ☐ N/A

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3) **Addresses content-specific skills and concepts from the related Program of Studies standards.** ☐ Strong ☒ Moderate ☐ Little ☐ N/A

4) **Content addressed is current, relevant and non-trivial** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

5) **Provides opportunities for critical thinking/reasoning** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

6) **Strengths, Weaknesses, Comments:**

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

This basal has good coverage of KY standards. Areas/concepts covered exceptionally well include Structure and Transformation of Matter, Motion and Forces, Earth and the Universe, and Unity and Diversity. Areas/concepts addressed but requiring supplementation include Biological Change, Energy Transformations, and Interdependence.

B. Functionality & Suitability

☐ **Strong Evidence**
☒ **Moderate Evidence**
☐ **Little or No Evidence**

1) **Suitability** ☐ Strong ☒ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) **Content quality** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) **Connections to Literacy** ☐ Strong ☒ Moderate ☐ Little
Note: may apply to either student or teacher editions

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) **Connections to Technology** ☐ Strong ☒ Moderate ☐ Little

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- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☐ Strong ☒ Moderate ☐ Little

- Provides support for ESL students
 - Provides support for differentiation of instruction in diverse classrooms
- Note: may apply only to teacher edition*

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Content addressed is adequate, however, fossils are not addressed. Teachers' guide provides literacy connections such as vocabulary, reading, and writing. Understanding the text does require performing the imbedded activities. Teachers' guide provides support for ESL and differentiated instruction. Technology is mentioned throughout the student edition in the form of web links. The web page appears, but none of the links were live. Other technology sources are referenced in the teacher's guide, however, none of these are available in the essential components.

C. Supports Inquiry and Skill Development

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
 - Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
 - Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
 - Provides opportunities for application of learned concepts.
 - Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
 - Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.
- Note: may apply to either teacher or student edition*

2) Skill Development

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities to make sense of data
 - Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
 - Provides opportunities to examine a range of types of evidence
 - Contains embedded activities (or extensions) that emphasize use of technology for problem solving
- Note: may apply to either teacher or student edition*

3) Strengths, Weaknesses, Comments:

Numerous opportunities to promote inquiry and apply learning are included in both the student and teacher editions. Some of the inquiry activities require materials that are not included. Some of these materials can be obtained locally and others cannot. Each lesson is organized using the 5 -E Learning Cycle Model. Science Process skills are imbedded throughout. Science tools are used to collect data.

D. Supports Best Practices of Teaching and Learning

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

☐ Strong ☒ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Student engagement is dependent on degree of implementation by the teacher. A variety of teaching strategies are an integral part of this basal. Some assessment strategies are suggested in the teachers' guide.

E. Has an Organization/ Format that Supports Learning and Teaching

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners

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- Presents chapters/lessons in an organized and logical sequence
 - Provides clearly stated objectives for each lesson.
 - Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
 - Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
 - Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
 - Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
 - Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

☐ Strong ☒ Moderate ☐ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The organization and presentation in the textbook is student friendly. Color and graphics are used well to enhance the text. Teachers' guide is user friendly with the student pages included surrounded by teacher resources. Media resources are referenced in the teachers' guide, but are not included as essential components.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

☐ Strong Evidence
☐ Moderate Evidence
☒ Little or No Evidence

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

None available.